

I. AMENDMENTS TO THE CLAIMS:

Please cancel claims 23, 25, 26, 30-33, 35 and 36 without prejudice.

The following claims will replace all prior listings, or versions, of claims in the above-captioned application.

Listing of Claims:

1. (Previously Presented) An apparatus for generating and feeding moisture, comprising:

a reactor having an upstream gas inlet side, a downstream moisture outlet side and a catalyst for generating moisture from hydrogen and oxygen, wherein the reactor generates moisture from hydrogen and oxygen by catalytic reaction at a temperature of not higher than 450°C;

means for reducing pressure provided on the downstream side of the reactor, and disposed so that moisture leaving and fed from said reactor is reduced in pressure by the means for reducing pressure while an internal high pressure in the reactor is maintained, wherein the means for reducing pressure comprises one or more components selected from the group consisting of an orifice, a valve, a capillary and a filter;

a first reactor structural component having a material gas supply joint defining a material gas supply passage;

a second reactor structural component having a moisture gas take-out joint defining a moisture outlet passage, wherein the first reactor structural component and the second reactor structural component are mated to form a reactor shell having an interior space, and wherein the second reactor structural component defines an inside wall surface;

a first reflector having an outer edge and disposed in the interior space to face the material gas supply passage;

a second reflector having an outer edge and disposed in the interior space to face the moisture outlet passage,

wherein the first reflector and the second reflector are identical flat plates symmetrically disposed in the interior space, and the first reflector and the second reflector each include a beveled peripheral portion inclined in cross-section;

wherein the beveled peripheral portion is such that a distance between each first or second reflector and its respective closest first or second structural component is increasing in a direction towards the outer edge of the reflector;

wherein the catalyst comprises a platinum coated catalyst layer provided on the inside wall surface of the second reactor structural component; and

a process chamber, wherein the reactor is connected to feed moisture gas to the process chamber, wherein the moisture gas fed into the process chamber is reduced in pressure by the means for reducing pressure.

Claims 2-21 have been cancelled.

22. (Previously presented) An apparatus for generating and feeding moisture according to claim 1, wherein internal pressure within the process chamber is 1-100 Torr.

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Previously Presented) An apparatus for generating and feeding moisture, comprising:

a reactor having an upstream gas inlet side, a downstream moisture outlet side and a catalyst for generating moisture from hydrogen and oxygen, wherein the reactor generates moisture from hydrogen and oxygen by catalytic reaction at a temperature set in the range of 300°C to 450°C;

means for reducing pressure provided on the downstream side of the reactor, and disposed so that moisture leaving and fed from said reactor is reduced in pressure by the means for reducing pressure while an internal high pressure in the reactor is maintained, wherein the means for reducing pressure comprises one or more components selected from the group consisting of an orifice, a valve, a capillary and a filter;

a first reactor structural component having a material gas supply joint defining a material gas supply passage;

a second reactor structural component having a moisture gas take-out joint defining a moisture outlet passage, wherein the first structural component and the second structural component are mated to form a reactor shell having an interior space, and the second structural component defines an inside wall surface;

a first reflector having an outer edge and disposed in the interior space;

a second reflector having an outer edge and disposed in the internal space to face the moisture outlet passage,

wherein the first reflector is disposed in the internal space to face the material gas supply passage, and the first reflector and the second reflector are identical flat plates symmetrically disposed in the interior space, and the first reflector and the second reflector each include a beveled peripheral portion inclined in cross-section;

wherein the beveled peripheral portion is such that a distance between each first or

second reflector and its respective closest first or second structural component is increasing in a direction towards the outer edge of the reflector;

wherein the catalyst comprises a platinum coated catalyst layer provided on the inside wall surface of the second reactor structural component; and

a process chamber, wherein the reactor is connected to feed moisture gas to the process chamber, wherein the moisture gas fed into the process chamber is reduced in pressure by the means for reducing pressure.

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Previously Presented) An apparatus for generating and feeding moisture according to Claim 1, wherein the second reflector is clamped by bolts to the inside wall surface of the second reactor structural component.

35. (Cancelled)

36. (Cancelled)

37. (Previously Presented) An apparatus for generating and feeding moisture according to Claim 28, wherein the second reflector is clamped by bolts to the inside wall surface of the second reactor structural component.